

MECHANICAL INSULATION SCHEDULE

APPLICATION	INSULATION		INSULATION FINISH		
	INSULATION TYPE	THICKNESS	INDOOR CONCEALED	INDOOR EXPOSED INCL. MECH ROOMS	OUTDOOR
DUCTWORK					
CONCEALED SUPPLY & OA DUCTS:	FIBERGLASS 3i	2"	6F	NA	NA
EXPOSED SUPPLY DUCTS AND OUTSIDE AIR DUCTS IN PUBLIC AREAS:	FIBERGLASS 5i	1.5"	NA	0F	NA
	FIBERGLASS 2i	2"	NA	6F	NA
EXPOSED SUPPLY/OA DUCTS AND PLENUMS IN MECH ROOMS/ BOH AREAS:	FIBERGLASS 2i	1"	NA	6F	NA
SUPPLY, RETURN AND OUTSIDE AIR DUCTS LOCATED OUTDOORS:	FIBERGLASS 5i & 2i	2 LAYERS OF 2"	NA	NA	7F
KITCHEN HOOD EXHAUST:	FIREMASTER FASTWRAP	2 LAYERS OF 1-1/2"	NA	NA	NA
REFRIGERANT SUCTION AND/OR HOT-GAS LINE PIPING					
INDOOR:	CELLULAR FOAM-4i	1"	0F	0F	NA
OUTDOOR:	CELLULAR FOAM-4i	1"	NA	NA	9F
				REFRIGERANT LIQUID LINES SO NOT NEED TO BE INSULATED	
MISCELLANEOUS PIPING					
AIR COND. CONDENSATION DRAIN PIPING:	CELLULAR FOAM-4i	1/2"	0F	0F	9F
CHILLED WATER SUPPLY & RETURN PIPING					
INDOOR:					
1-1/4" & SMALLER:	FIBERGLASS-6i	1"	8F	5F	NA
	CELLULAR FOAM-4i	1"	0F	0F	NA
	FIBERGLASS-6i	1-1/2"	8F	5F	NA
1-1/2" & LARGER:	CELLULAR FOAM-4i	1-1/2"	0F	0F	NA
OUTDOOR:					
1-1/4" & SMALLER:	FIBERGLASS-6i	1"	NA	NA	3F
	CELLULAR FOAM-4i	1"	NA	NA	9F
1-1/2" & LARGER:	FIBERGLASS-6i	2"	NA	NA	3F
	CELLULAR FOAM-4i	2"	NA	NA	9F
CONDENSER WATER SUPPLY & RETURN PIPING					
INDOOR W/ WATER SIDE ECONOMIZER:	FIBERGLASS-6i	1-1/2"	8F	5F	NA
INDOOR W/O WATER SIDE ECONOMIZER:	NONE	0	NA	PAINT	NA
STEAM & STEAM CONDENSATE:	MINERAL-FIBER-7i	4-1/2"	10F	10F	NA
OUTDOOR:	FIBERGLASS-6i	2"	NA	NA	3F
HEATING WATER SUPPLY & RETURN					
INDOOR 1-1/4" & SMALLER:	FIBERGLASS-6i	1-1/2"	8F	5F	3F
INDOOR 1-1/2" & LARGER:	FIBERGLASS-6i	2"	8F	5F	3F
OUTDOOR - ALL:	FIBERGLASS-6i	3"	NA	NA	3F
INSULATION MATERIALS:					
1. CALCIUM SILICATE - MAXIMUM K FACTOR AT 500 DEGREES F SHALL BE 0.55, MUST ASTM C411 TO 1200 DEGREES F, AND MUST MEET NFPA 255 AND UL 723 FOR 00 FLAME SPREAD AND SMOKE DEVELOPED.					
2. FIBERGLASS BOARD - PROVIDE SEMI-RIGID FIBERGLASS BOARD WITH A DENSITY OF 3 LBS/FT3, MAXIMUM K FACTOR AT 75 DEGREES F SHALL BE 0.24 AND A TEMPERATURE LIMIT OF 250 DEGREES F (FACED) AND 450 DEGREES F (UNFACED), NFPA 255 AND UL 723 FOR 25/50 FLAME SPREAD AND SMOKE DEVELOPED.					
3. FIBERGLASS DUCT WRAP - MAXIMUM K FACTOR AT 75 DEGREES F SHALL BE 0.30, MUST PASS ASTM C411 TO 250 DEGREES F FACED, DENSITY SHALL BE 0.75 LBS/FT3, NFPA 255 AND UL 723 FOR 25/50 FLAME SPREAD AND SMOKE DEVELOPMENT.					
4. CELLULAR FOAM - EQUAL TO APMARFLEX TUBES OR SHEETS, AS APPLICABLE TO INSTALLATION, MAXIMUM K FACTOR AT 75 DEGREES F SHALL BE 0.28, MAXIMUM OPERATING TEMPERATURE OF 200 DEGREES F, MUST MEET NFPA 255 AND UL723 FOR 25/50 FLAME SPREAD AND SMOKE DEVELOPED AND MUST BE FREE OF ANY GFC'S, HFC'S, OR HFO'S.					
5. FIBERGLASS DUCT LINER W/ ANTIMICROBIAL RESISTANT COATING OR CLOSED-CELL ELASTOMERIC DUCT LINER - REFER TO SECTION 23313 FOR ADDITIONAL INFORMATION.					
6. FIBERGLASS PIPE INSULATION ONLY WHERE SPECIFICALLY CALLED FOR ON DRAWINGS OR IN SPECS - MAXIMUM K FACTOR AT 100 DEGREES F SHALL BE 0.24, MUST PASS ASTM C411 TO 850 DEGREES F, DENSITY SHALL BE 3.5 LBS/FT3/ NFPA 255 AND UL 723 FOR 25/50 FLAME SPREAD AND SMOKE DEVELOPED.					
7. MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I OR II, NA, NOT APPLICABLE OR NONE REQUIRED.					
FINISH TYPES					
0F, PAINT GRIP FINISH					
1F, 0.010" T-304 STAINLESS STEEL JACKETING - CORRUGATED, PROVIDE 3/16" CORRUGATED ROLL JACKETING FOR PIPING AND TANKS LESS THAN 6 FEET DIAMETER AND DEEP CORRUGATED SHEETS FOR DIAMETERS LARGER THAN 6 FEET.					
2F, 0.010" T-304 STAINLESS STEEL JACKETING - SMOOTH FINISH.					
3F, CORRUGATED ALUMINUM - 0.010" UP THROUGH 24" PIPE SIZE, 0.024" LARGER THAN 24".					
4F, SMOOTH ALUMINUM - 0.010" UP THROUGH 12" PIPE SIZE, 0.024" LARGER THAN 12".					
5F, 20-MIL PVC (25 FLAME SPREAD AND 50 SMOKE DEVELOPED.)					
6F, FOLIOREINFORCEDKTRACT JACKET (VAPOR BARRIER).					
7F, 1/4-INCH WEATHERPROOF MASTIC WITH GLASS MESH REINFORCEMENT, SLOPE TOP OF DUCT MINIMUM OF 1/4" PER FOOT TO PREVENT PONDING.					
8F, WHITE ALL-SERVICE JACKET (VAPOR BARRIER).					
9F, WATER BASED LATEX ENAMEL WEATHER RESISTANT AND UV RESISTANT FINISH EQUAL TO ARMAFLEX WB FINISH					
10F, 125 MILS THICK EXTRUDED, BLACK, HIGH DENSITY POLYETHYLENE (HDPE), INNER SURFACE SHALL BE OXIDIZED BY MEANS OF CORONA OR FLAME TREATMENT.					
NA, NOT APPLICABLE OR NONE REQUIRED.					

MECHANICAL CITY OF DALLAS CH 61 GREEN BUILDING NOTES:

SECTION 802.1 SCOPE. TO FACILITATE THE OPERATION AND MAINTENANCE OF THE COMPLETED BUILDING, THE BUILDING AND ITS SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF SECTIONS 802.2 AND 802.3.

802.2 AIR HANDLING SYSTEM ACCESS: THE ARRANGEMENT AND LOCATION OF AIR HANDLING SYSTEM COMPONENTS, INCLUDING, BUT NOT LIMITED TO, DUCTS, AIR HANDLING UNITS, FANS, COILS, AND CONDENSATE PANS, SHALL ALLOW ACCESS FOR CLEANING AND REPAIR OF AIR HANDLING SURFACES. SUCH COMPONENTS ACCESS PORTS SHALL BE INSTALLED IN THE AIR HANDLING SYSTEM TO PERMIT SUCH CLEANING AND REPAIRS. PIPING, CONDUTITS, AND OTHER BUILDING COMPONENTS SHALL NOT BE LOCATED SO AS TO OBSTRUCT THE REQUIRED ACCESS PORTS.

802.3 AIR HANDLING SYSTEM FILTRATION AND BYPASS PATHWAYS: AIR HANDLING EQUIPMENT AND HVAC EQUIPMENT SHALL BE DESIGNED AND INSTALLED TO LIMIT THE AMOUNT OF AIRFLOW THAT BY PASSES THE AIR FILTERS AND SHALL COMPLY WITH THE FOLLOWING:

- CHANNELS, RACKS AND OTHER FILTER-RETAINING CONSTRUCTIONS THAT DO NOT SEAL TIGHTLY TO THE FILTER FRAME BY MEANS OF FRICTION FIT SHALL BE PROVIDED WITH A MEANS TO SEAL THE FILTER FRAME TO THE FILTER-HOLDING CONSTRUCTION.
- WHERE STANDARD SIZE FILTERS ARE INSTALLED IN BANKS OF MULTIPLE FILTERS, GASKETS SHALL SEAL THE GAP BETWEEN THE FRAMES OF ADJACENT FILTERS.
- AS AN ALTERNATIVE TO GASKETS, THE FRAMES OF ADJACENT FILTERS SHALL BE COMPRESSED TIGHTLY TOGETHER BY MEANS OF SPRING ELEMENTS THAT ARE BUILT INTO THE FILTER RETAINING CONSTRUCTION.
- CHANNELS, RACKS AND OTHER FILTER-RETAINING CONSTRUCTIONS SHALL BE SEALED TO THE DUCT OR HOUSING OF THE HVAC EQUIPMENT SERVED BY THE FILTERS.
- FILTER ACCESS DOORS IN DUCTS AND HVAC EQUIPMENT SHALL BE DESIGNED TO LIMIT THE AMOUNT OF AIRFLOW THAT BYPASSES THE FILTERS.
- FIELD OR SHOP-FABRICATED SPACERS SHALL NOT BE INSTALLED FOR THE PURPOSE OF REPLACING THE INTENDED SIZE FILTER WITH A SMALLER SIZE FILTER.
- GASKETS AND SEALS SHALL BE ACCESSIBLE FOR REPAIR, MAINTENANCE AND REPLACEMENT.

803.1 CONSTRUCTION PHASE REQUIREMENTS. THE VENTILATION OF BUILDINGS DURING THE CONSTRUCTION PHASE SHALL BE IN ACCORDANCE WITH SECTIONS 803.1.1 THROUGH 803.1.3.

803.1.1 DUCT OPENINGS. DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL, OR SHALL BE CLOSED BY AN APPROVED METHOD TO REDUCE THE AMOUNT OF DUST AND DEBRIS THAT COLLECTS IN THE SYSTEM FROM THE TIME OF ROUGH-IN INSTALLATION AND UNTIL STARTUP OF THE HEATING AND COOLING EQUIPMENT. DUST AND DEBRIS SHALL BE CLEANED FROM DUCT OPENINGS PRIOR TO SYSTEM FLUSH OUT AND BUILDING OCCUPANCY.

803.1.2 INDOOR AIR QUALITY DURING CONSTRUCTION. TEMPORARY VENTILATION DURING CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 803.1.2.1 THROUGH 803.1.2.3.

803.1.2.1 VENTILATION. VENTILATION DURING CONSTRUCTION SHALL BE ACHIEVED THROUGH OPENINGS IN THE BUILDING ENVELOPE USING ONE OR MORE OF THE FOLLOWING METHODS:

- NATURAL VENTILATION IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE OR THE INTERNATIONAL MECHANICAL CODE.
- FANS THAT PRODUCE A MINIMUM OF THREE AIR CHANGES PER HOUR.
- EXHAUST IN THE WORK AREA AT A RATE OF NOT LESS THAN 0.05 CFM/FT2 (0.24 L/S/M2) AND NOT LESS THAN 10 PERCENT GREATER THAN THE SUPPLY AIR RATE SO AS TO MAINTAIN NEGATIVE PRESSURIZATION OF THE SPACE.

803.1.2.2 PROTECTION OF HVAC SYSTEM OPENINGS, HVAC SUPPLY AND RETURN DUCT AND EQUIPMENT OPENINGS SHALL BE PROTECTED DURING DUST-PRODUCING OPERATIONS.

803.1.2.3 RETURN AIR FILTERS. WHERE A FORCED AIR HVAC SYSTEM IS USED DURING CONSTRUCTION, NEW RETURN AIR FILTERS SHALL BE INSTALLED PRIOR TO SYSTEM FLUSH OUT AND BUILDING OCCUPANCY.

803.1.3 CONSTRUCTION PHASE DUCTLESS SYSTEM OR FILTER, WHERE SPACES ARE CONDITIONED DURING THE CONSTRUCTION PHASE, SPACE CONDITIONING SYSTEMS SHALL BE OF THE DUCTLESS VARIETY, OR FILTERS FOR THE DUCTED SYSTEMS SHALL BE RATED AT MERV 6 OR HIGHER IN ACCORDANCE WITH ASHRAE 52.2, AND SYSTEM EQUIPMENT SHALL BE DESIGNED TO BE COMPATIBLE. DUCT SYSTEM DESIGN SHALL ACCOUNT FOR PRESSURE DROP ACROSS THE FILTER.

803.2 THERMAL ENVIRONMENTAL CONDITIONS FOR HUMAN OCCUPANCY. BUILDING SHALL BE DESIGNED IN COMPLIANCE WITH ASHRAE 55, SECTIONS 6.1, "DESIGN" AND 6.2, "DOCUMENTATION."

EXCEPTION: SPACES WITH SPECIAL REQUIREMENTS FOR PROCESSES, ACTIVITIES, OR CONTENTS THAT REQUIRE A THERMAL ENVIRONMENT OUTSIDE OF THAT WHICH HUMANS FIND THERMALLY ACCEPTABLE, SUCH AS FOOD STORAGE, NATATORIUMS, SHOWER ROOMS, SAUNAS AND DRYING ROOMS.

803.3 ISOLATION OF POLLUTANT SOURCES. THE ISOLATION OF POLLUTANT SOURCES RELATED TO PRINT, COPY AND JANITORIAL ROOMS, GARAGES AND HANGERS SHALL BE IN ACCORDANCE WITH SECTION 803.3.1.

803.3.1 PRINTER, COPIER AND JANITORIAL ROOMS, ENCLOSED ROOMS OR SPACES THAT ARE OVER 100 SQUARE FEET (9.3 M2) IN AREA AND THAT ARE USED PRIMARILY AS A PRINT OR COPY FACILITY CONTAINING FIVE OR MORE PRINTERS, COPY MACHINES, SCANNERS, FACSIMILE MACHINES OR SIMILAR MACHINES IN ANY COMBINATION, AND ROOMS USED PRIMARILY AS JANITORIAL ROOMS OR CLOSETS WHERE THE USE OR STORAGE OF CHEMICALS OCCURS, SHALL COMPLY WITH ALL OF THE FOLLOWING:

- THE ENCLOSING WALLS SHALL EXTEND FROM THE FLOOR SURFACE TO THE UNDERSIDE OF THE FLOOR, ROOF DECK OR SOLID CEILING ABOVE AND SHALL BE CONSTRUCTED TO RESIST THE PASSAGE OF AIRBORNE CHEMICAL POLLUTANTS AND SHALL BE CONSTRUCTED AND SEALED AS REQUIRED FOR 1-HOUR FIRE-RESISTANCE-RATED CONSTRUCTION ASSEMBLIES. ALTERNATIVELY, FOR JANITORIAL ROOMS AND CLOSETS, ALL CHEMICALS SHALL BE STORED IN APPROVED CHEMICAL SAFETY STORAGE CABINETS.
- DOORS IN THE ENCLOSING WALLS SHALL BE AUTOMATIC OR SELF-CLOSING.
- AN HVAC SYSTEM SHALL BE PROVIDED THAT PROVIDES SEPARATE EXHAUST AIRFLOW TO THE OUTDOORS AT A RATE OF NOT LESS THAN 0.50 CFM PER SQUARE FOOT (2.4 L/S/M2), THAT MAINTAINS A NEGATIVE PRESSURE OF NOT LESS THAN 7 PA WITHIN THE ROOM, AND THAT FORBIDS THE RECIRCULATION OF AIR FROM THE ROOM TO OTHER PORTIONS OF THE BUILDINGS.

803.4 FILTERS. FILTERS FOR AIR CONDITIONING SYSTEMS THAT SERVE OCCUPIED SPACES SHALL BE RATED AT MERV 11 OR HIGHER, IN ACCORDANCE WITH ASHRAE STANDARD 52.2, AND SYSTEM EQUIPMENT SHALL BE DESIGNED TO BE COMPATIBLE. THE AIR HANDLING SYSTEM DESIGN SHALL ACCOUNT FOR PRESSURE DROP ACROSS THE FILTER. THE PRESSURE DROP ACROSS CLEAN MERV 11 FILTERS SHALL BE NOT GREATER THAN 0.45 IN. W.C. AT 500 FPM (412 PA AT 2.54 M/S) FILTER FACE VELOCITY. FILTER PERFORMANCE SHALL BE SHOWN ON THE FILTER MANUFACTURER'S DATA SHEET.

EXCEPTION: FILTERS FOR AIR CONDITIONING SYSTEMS THAT SERVE OCCUPIED SPACES IN MULTIFAMILY RESIDENTIAL UNITS OR LIGHT COMMERCIAL SPACES SHALL BE RATED AT MERV 6 FOR SYSTEMS RATED AT 30,000 BTU/H OR LESS AND MERV 8 FOR SYSTEMS RATED OVER 30,000 BTU/H BUT NO GREATER THAN 60,000 BTU/H.

HVAC SYMBOLS

SYMBOL	DESCRIPTION
	ARROW INDICATES EXISTING TO BE RELOCATED AS INDICATED ON PLAN
	REDISTRIBUTE AIR TO EXISTING DIFFUSER AS INDICATED ON PLAN
	INDICATES SIZE, CFM, AND DIFFUSER TYPE
	NEW CEILING SUPPLY DIFFUSER
	NEW RETURN AIR/EXHAUST GRILLE
	EXISTING RETURN AIR/EXHAUST GRILLE
	NEW SLOT DIFFUSER
	EXISTING SLOT DIFFUSER
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	EXISTING TO REMAIN
	REMOVE EXISTING AS INDICATED
	CAP EXISTING DUCT
	MANUAL VOLUME CONTROL DAMPER
	DUCT TRANSITION
	FIRE (SMOKE) DAMPER (24V ACTUATOR)
	NEW OR RELOCATED THERMOSTAT
	EXISTING THERMOSTAT
	FLEXIBLE DUCT
	INDICATES A WALL TO DECK (FOR COORDINATION PURPOSE ONLY-REFER TO ARCHITECTS PLANS FOR REQUIREMENTS)

GENERAL NOTES:

- ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES, RULES, REGULATIONS AND REQUIREMENTS.
- ALL WORK SHALL COMPLY WITH THE BUILDING TENANT CONSTRUCTION GUIDE. COORDINATE WITH BUILDING MANAGEMENT/OWNER FOR ACCESS TO ANY TENANT LEASE SPACES THAT MIGHT BE REQUIRED FOR THE INSTALLATION. UNLESS DIRECTED BY LANDLORD, ALL WORK SHALL BE COMPLETED BY THE CONTRACTOR GUARANTEED FOR 1 YEAR.
- EXISTING CONDITIONS ARE BASED ON INFORMATION PROVIDED BY SITE SURVEY AND PREVIOUS RECORD DRAWINGS. HOWEVER, IT IS NOT INTENDED TO BE A TRUE REPRESENTATION OF ACTUAL CONDITIONS. CONTRACTOR SHALL VISIT JOB SITE PRIOR TO BIDDING TO ASCERTAIN EXISTING CONDITIONS AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.
- CONTRACTOR SHALL ENGAGE AN INDEPENDENT AIR BALANCING COMPANY TO OBTAIN AIR DUCT LEAK TESTS SHOWN ON DRAWINGS. AT COMPLETION OF AIR BALANCE, BALANCING DAMPERS SHALL BE TIGHTENED AND PROPERLY SEALED WITH FOIL TAPE.
- ALL MEDIUM AND LOW PRESSURE DUCTWORK SHALL BE GALVANIZED SHEET METAL, FABRICATED, INSTALLED AND SEALED MEDIUM PRESSURE DUCTWORK FOR HIGH AND LOW PRESSURE DUCTWORK FOR F.W.G. IN ACCORDANCE WITH SMACNA STANDARD. DUCTWORK SHALL BE INSULATED WITH 2" FIBERGLASS BLANKET WITH FOIL FACED VAPOR BARRIER TO MEET ECOC REQUIREMENT (MIN RS VALUE). IF DUCTWORK IS IN AN EXPOSED CEILING, PROVIDE INTERNALLY INSULATED PAINT GRADE DUCTWORK.
- ALL SUPPLY AND RETURN DUCT SIZES ARE FREE AREAS.
- INDIVIDUAL DUCT RUN-OUTS TO EACH DIFFUSER SHALL BE SIZED IN ACCORDANCE TO THE DIFFUSER NECK SIZE FOUND IN THE GRILLES-REGISTERS-DIFFUSERS SCHEDULE UNLESS NOTED OTHERWISE.
- OFFSET DUCTS INTO JOIST SPACE FOR CLEARANCE WHERE SPACE ABOVE CEILING IS NOT SUFFICIENT FOR DUCTS TO CROSS OTHER DUCTS OR WORK OF OTHER TRADES.
- INSULATED FLEX DUCT IN THE MEDIUM PRESSURE SYSTEM SHALL BE UTILIZED AT INLET TO VAV BOX OR FAN POWERED BOX ONLY. LENGTH SHALL BE LIMITED TO AN OVERALL LENGTH OF TWO (2) FEET AND BE STRAIGHT RUN. INSULATED FLEX DUCT IN THE LOW PRESSURE SYSTEM SHALL BE LIMITED TO AN OVERALL LENGTH OF SIX (6) FEET WITH A MAXIMUM OF A 90 DEGREE CHANGE IN DIRECTION. SUPPORTS SHALL BE SADDLE BANNED TO STRUCTURE. SUPPORTING FROM FIRE PROTECTION PIPING, ELECTRICAL CONDUIT OR CEILING SUPPORT WIRES IS NOT ACCEPTABLE.
- VAV BOXES AND FAN POWERED BOXES SHALL HAVE 24" MINIMUM CLEARANCE ON ALL SIDES OF BOX.
- CONTRACTOR SHALL VERIFY ALL EXISTING SLOT DIFFUSERS AS LOCATED PER DRAWINGS OR ENSURE RELOCATION TO MATCH PLANS. CONTRACTOR SHALL ALSO VERIFY THAT EXISTING SLOT INDICATED SHALL BE ABLE TO DELIVER CFM AS NOTED. IF NOT, CONTRACTOR SHALL REMOVE EXISTING SLOT AND REPLACE WITH NEW OR RELOCATED SLOT THAT CAN DELIVER CFM AS INDICATED.
- ALL ENCLOSED ROOMS (INTERIOR AND PERIMETER) SHALL HAVE RETURN AIR PATH. ROOMS WITH ALL WALL TO DECK SHALL HAVE LINED SHEET METAL RETURN AIR BOOTS PLACED IN WALL ABOVE CEILING SIZED FOR 500 FPM MAXIMUM. FIRE RATED WALLS SHALL HAVE FIRE DAMPERS WITHIN THE DUCT PER LOCAL CODE REQUIREMENTS. FIRE DAMPERS AND FIRE-SMOKE DAMPERS SHALL BE FREE AREA/OUT OF AIRSTREAM TYPE. ALL MOTORIZED DAMPERS SHALL BE FREE AREA/OUT OF AIRSTREAM TYPE.
- PIPES AND DUCTS TO BE COORDINATED ON JOB WITH BUILDING STRUCTURE AND WORK OF OTHER CONTRACTORS. ROUTE AS HIGH AS PHYSICALLY POSSIBLE. DO NOT COORDINATE CEILING DIFFUSERS AND GRILLES WITH LIGHTING FIXTURES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
- THERMOSTATS TO BE MOUNTED 48" ABOVE FINISHED FLOOR LEVEL UNLESS NOTED OTHERWISE ON THE PLANS. CONTRACTOR SHALL COORDINATE LOCATION OF THERMOSTATS WITH ARCHITECT IN FIELD.
- REPAIR AND PATCH CONSTRUCTION DAMAGED DUE TO THE DEMOLITION OF THIS PROJECT, USING SAME METHODS AND MATERIALS TO MATCH EXISTING.
- EVAPORATORS SHALL HAVE A PRIMARY INSULATED CONDENSATE DRAIN LINE SLOPED 1/8"/FT. EXTENDED TO NEAREST FLOOR DRAIN IN MECHANICAL ROOM OR MOP SINK. GALVANIZED SHEET METAL SECONDARY DRAIN PANS SHALL HAVE LEAK DETECTION TAPE AND ROUTE THE PAN AND ROUTE THE PAN INSULATED CONDENSATE DRAIN LINE SLOPED 1/8"/FT NEXT TO BUT INDEPENDENT OF PRIMARY DRAIN LINES.
- COMPUTER GRADE AC UNITS AND WATER SOURCE HEAT PUMPS SHALL HAVE TWO (2) SETS OF 2" PLEATED FILTERS. FIRST SET FOR DURING CONSTRUCTION, SECOND SET AT MOVE-IN.
- PROVIDE TEMPORARY HIGH EFFICIENCY FILTER MEDIA ON MAIN RETURN AIR AND EXHAUST FROM FLOOR AT BEGINNING OF PROJECT AND REPLACED AT TWO (2) WEEK INTERVALS UNTIL PROJECT COMPLETION AT WHICH TIME THE FILTER MEDIA SHALL BE REMOVED.
- CONTRACTOR SHALL PROVIDE YOUNG CONCEALED DAMPER REGULATORS WITH A DAMPER CABLE CONTROL KIT EQUAL TO BOWDEN MODEL 270-896P FOR ALL GYPSUM BOARD APPLICATIONS. COORDINATE SHAFT SIZE OF DAMPER WITH KIT FOR PROPER COMPATIBILITY. REFER TO ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS INDICATED WITH GYPSUM BOARD CEILING AND COORDINATE WITH ARCHITECT FOR EXACT LOCATION OF INSTALLATION.
- CONNECTIONS BETWEEN FERROUS AND NON-FERROUS PIPING SYSTEMS, AND BETWEEN FERROUS PIPING SYSTEMS AND NON-FERROUS CONNECTIONS TO EQUIPMENT SHALL BE MADE BY THE USE OF DIELECTRIC UNIONS, COUPLINGS OR FLANGES AS MANUFACTURED BY CRANE, EPCO, F.M. MALONEY, UNIVERSAL MANUFACTURING CO.
- FLEXIBLE DUCTS SHALL BE SIMILAR AND EQUAL TO THERMOFLEX TYPE M-KE. FLEXIBLE DUCTS SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF UL-181, NFPA 90A AND OTHER GOVERNING AUTHORITIES.
- FLEXIBLE DUCT BETWEEN DUCT AND AC UNITS AND EXHAUST FANS SHALL BE EQUAL TO VENTFABRICS "VENTGLAS".
- AIR CONDITIONING COOLING CONDENSATE PIPING TO BE ONE-HALF INCH THICK ARMAFLEX. FITTINGS SHALL BE PRE-MOLDED OF THE SAME MATERIAL. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS.
- DUCTLINER SHALL BE 1-INCH ACOUSTICAL DUCT LINING IN ACCORDANCE WITH SMACNA STANDARDS. DUCT LINING SHALL BE OWENS-CORNING FIBERGLAS "AEROFLEX" NO. 200 OR EQUAL.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THAT THE EXISTING DUCTWORK SIZE IS THE SAME AS INDICATED ON THE PLANS AND IS ADEQUATE FOR NO MORE THAN 0.80 OF STATIC PRESSURE PER 100 FEET FOR MEDIUM PRESSURE DUCTWORK BASED ON THE CFMS INDICATED ON THE PLANS AND THAT EXISTING DIFFUSER NECK SIZES MEET THE REQUIREMENTS AS INDICATED FOR NEW DIFFUSERS.
- ALL EXISTING DUCTWORK SHALL BE FIELD VERIFIED TO BE INSULATED AND IN GOOD CONDITION. ANY TORN, DAMAGED OR MISSING INSULATION WILL BE REPLACED. EXISTING CONTROLS SHALL BE CONFIRMED TO BE IN WORKING CONDITION.
- CONTRACTOR SHALL ENGAGE A STRUCTURAL ENGINEERING FIRM FOR STRUCTURAL SUPPORT OF ROOFTOP UNITS ON ROOF AS REQUIRED. VERIFY EXACT LOCATION OF ROOFTOP UNITS ON ROOF WITH ARCHITECT AND OBTAIN A WRITTEN APPROVAL FROM LANDLORD BEFORE INSTALLATION OF ROOFTOP UNITS. CUTTING AND WEATHER PROOFING OF ROOF SHALL BE PERFORMED BY A LICENSED ROOF CONTRACTOR AND APPROVED BY THE LANDLORD.
- CONTROL CONTRACTOR SHALL PROVIDE 24V TRANSFORMER FOR UP TO 5 VAV BOXES SERVED FROM 120V J-BOX. PROVIDE CONTROL WIRE TO EACH VAV BOX. REFER TO GENERAL NOTE XX ON SHEET XX.
- INSTALL DUCTMOUNTED SMOKE DETECTORS (FURNISHED BY DIV 16).

CORGAN

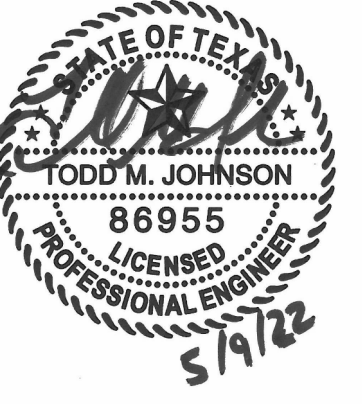
CORGAN
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ISSUES

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REVISIONS

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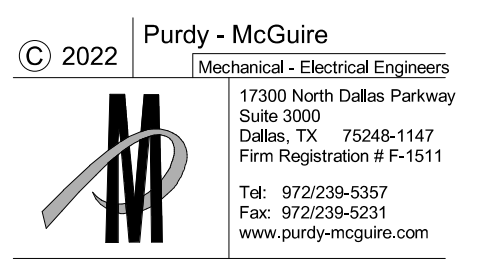
AT HOME - DESIGN CENTER

PROJECT COMMISSIONING REQUIREMENTS:

- ALL BUILDING MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE COMMISSIONED BY A COMMISSIONING AGENT IN ACCORDANCE WITH ALL REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION (IECC) SECTION C408. REFER TO THE APPLICABLE CODES NOTE ON THIS SHEET FOR THE REQUIRED CODE YEAR OF THE IECC. IT IS THE OWNER'S RESPONSIBILITY TO HIRE A COMMISSIONING AUTHORITY TO ENSURE ALL REQUIRED COMMISSIONING ACTIVITIES AND REQUIREMENTS ARE MET.
- THE COMMISSIONING AGENT SHALL PERFORM ALL TASKS ACCORDING TO THE REQUIREMENTS OF IECC SECTION C408 AND ANY OTHER REQUIREMENTS OF THE PROJECT.
- THE TESTING AND BALANCING (TAB), BUILDING AUTOMATION SYSTEMS (BAS), GENERAL CONTRACTOR, MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS SHALL PROVIDE FULL SUPPORT IN ALL COMMISSIONING ACTIVITIES AND PERFORM ALL NECESSARY COMMISSIONING TASKS ON THIS PROJECT AS REQUIRED BY IECC SECTION C408.
- LEED PROJECTS HAVE ADDITIONAL COMMISSIONING REQUIREMENTS THAT VARY FROM THOSE LISTED ABOVE.

MECHANICAL APPLICABLE CODES

- 2015 INTERNATIONAL MECHANICAL CODE
- 2015 INTERNATIONAL ENERGY CONSERVATION (IECC)
- CITY OF DALLAS LOCAL AMENDMENTS



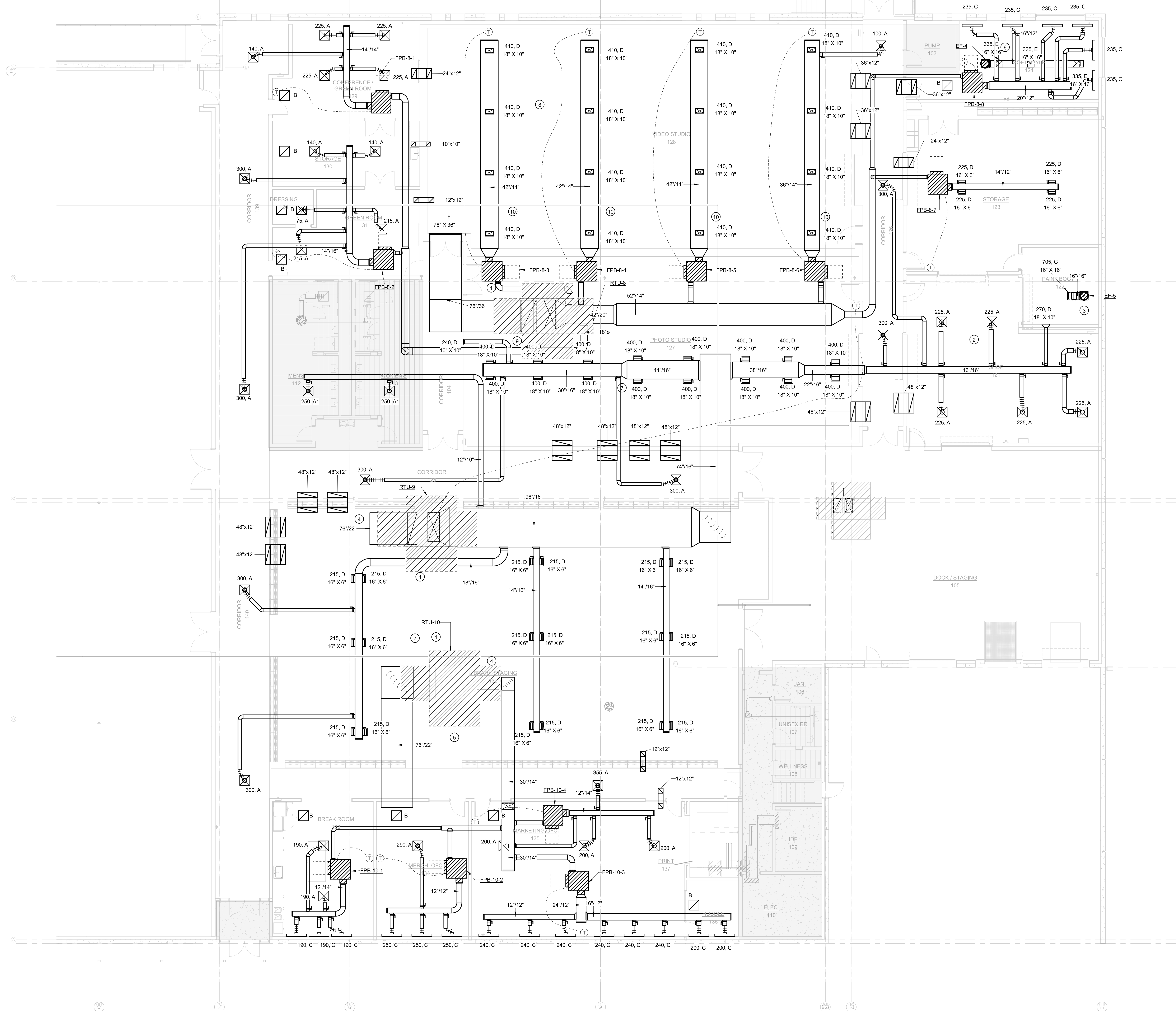
PMJ JOB NO. 21006.018
PROJECT MGR. TODD JOHNSON
THIS DRAWING SHALL NOT BE REPRODUCED FOR ANY PROJECT OTHER THAN THE PROJECT NOTED IN THE TITLE BLOCK, WITHOUT THE WRITTEN CONSENT OF PURDY-MCGUIRE, INC., DALLAS, TX

KEYPLAN

MECHANICAL NOTES & SYMBOLS

JOB DATE SHEET 21436.0000 05.09.2022

iM00.01

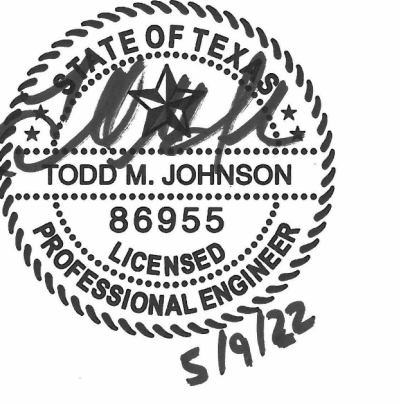


KEYED NOTES - SHEET IM201B

- 1 ROUTE 1" CONDENSATE TO MOP SINK IN JAN 106
- 2 PROVIDE DUST COLLECTION SUITABLE FOR 1116 SF ROOM LOCATED ON ROOF EQUAL TO TORIT.
- 3 PROVIDE EXHAUST FAN. LOCATE INLET 12" AFF. REF IM601 FOR SCHEDULE
- 4 PROVIDE VAV ROOFTOP UNIT REF IM0601 FOR SCHEDULE
- 5 PROVIDE VAV ROOFTOP UNIT REF IM0601 FOR SCHEDULE.
- 6 PROVIDE EXHAUST FAN WITH DUCTWORK AND 3 DAMPERED EXHAUST GRILLES LOCATED DIRECTLY OVER SHELVING
- 7 PROVIDE EXPOSED DUCTWORK WITH SIDEWALL GRILLES IN THIS AREA.
- 8 SIDEWALL DUCTWORK TO BE SIZED FOR UNDER 500 FPM
- 9 PROVIDE VAV ROOFTOP UNIT REF IM0601 FOR SCHEDULE.
- 10 PROVIDE 1" FIBERGLASS ACOUSTIC LINER IN ENTIRE DUCT.

ISSUES	
1	3.15.2022 ISSUE FOR PERMIT
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REVISIONS	



AT HOME - DESIGN CENTER

KEYPLAN

LEVEL 01
MECHANICAL
PLAN - AREA B

5/6/2022 12:03:00 PM IM02.01B/LEVEL 01 MECHANICAL PLAN - AREA B

1 LEVEL 01 MECHANICAL PLAN - AREA B
1/8" = 1'-0"

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JOB 21436.0000
DATE 05.09.2022
SHEET

IM02.01B

